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AUTHOR Sorgman, Margo I.; Uhlenberg, Donald M.
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ABSTRACT

Students' interests are assessed in human geography and in the man-land orientation (how people have adjusted and adapted their environment). The major problems investigated are to determine which areas of human geography are of most interest to upper elementary students, and to assess the perceptions of these students regarding the best place to learn about those areas of interest. The test sample was composed of 30 students each from fourth, fifth, and sixth grades of a lower middle income, urban elementary school. A questionnaire consisting of 32 inquiry questions derived from "Focus on Man: Social Studies for Utah Schools," a prospectus published by the Utah State Board of Education, was used because it is inquiry oriented, focuses on the human aspects of geography, and is the basic reference for social studies in Utah elementary schools. It was concluded that the man-land approach is appropriate for geographic inquiry in the upper elementary school grades. Recommendations for teaching the man-land approach to geography for upper elementary students are given. (Author/ND)

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INTERESTS OF UPPER ELEMENTARY STUDENTS IN HUMAN GEOGRAPHY AND THEIR PERCEPTIONS OF EFFECTIVE LEARNING ENVIRONMENTS

Paper Presented
to the

ROCKY MOUNTAIN SOCIAL SCIENCE ASSOCIATION
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by

Margo I. Sorgman

University of Utah
Salt Lake City, Utah

and

Donald M. Uhlenberg

University of Utah
Salt Lake City, Utah

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That children possess a natural inclination to inquire has been observed by a number of educators.(Bruner, 1973; Elkind, 1974; Hopkins, 1968; Suchman, 1965). This curiosity is often characterized by positive reactions to and persistent exploration of new stimuli; by a desire to know about themselves and their environment; and by an active search for new experiences.(McCartin, 1970).

When the child's inquiry is focused on the earth as a human habitat, he/she has in fact become an inquirer in the discipline of geography. From this point of view, then, the study of geography is "...a way of looking at the earth, not an inventory of its content".(Broek, 1965 p. 72).

Unfortunately, in far too many elementary classrooms, the curriculum of geography education is nothing more than an inventory of its contents with learning amounting to an endless accumulation of facts. (Vuicich and Stoltman, 1974). Consequently, the student studies the history of geography. Effective geographic inquiry is dependent upon teachers who are sensitive to what Elkind calls the students' own rhythm and pace of learning. (1974). They are educators capable of promoting "...the spirit and mood of inquiry, critical skepticism, inventiveness, imagination, and enthusiasm for learning." (Tucker, 1973, p. 48)

Effective geographic inquiry relies on the presence of 3 factors:

1) Sufficient interest in a topic to warrant investigation,
2) Cognitive ability which is sufficiently developed to handle the necessary conceptual requirements, and
3) Opportunity to engage in the processes of inquiry which require direct experiences with the subject under investigation.

The most popular approach to geographical inquiry in the upper elementary grades has been the man-land orientation, which lends itself to these three criteria.

First of all, the study of how people have adjusted to and adapted their environment has been found to be of major interest to students in the upper elementary grades (Bacon, 1974; Knox, 1972). Secondly, these students are at a stage of cognitive development which enables them to make sense out of the incongruities of their physical environment. For example, studies of children's spatial stages reveals that middle grade students are capable of recognizing the decentration and integration of territories, two important skills for geographic understanding (Piaget, 1928; Rand & Towler, 1973; Stoltman, 1971). Finally, it has the potential for involving students in field-based experiences which are necessary in fostering students' spatial understanding and conceptual development. (Piaget, 1928; Rand & Towler, 1973; Spodek, 1969; Stoltman, 1971).

While there are studies confirming the cognitive capabilities of upper elementary students to engage in inquiry, there is a lack of data which assesses students' interests in human geography and where those interests could best be pursued. It is hoped that this study will provide some of the necessary data.

Problem

The major problems under investigation were:

A. To determine which areas of human geography are of most interest to upper elementary students,

B. To assess the perceptions of these students regarding the best place to learn about those areas of interest.

Method

Subjects: Subjects for this study were 201 students (64 fourth graders, 67 fifth graders, and 70 sixth graders) attending a lower middle income, urban elementary school. From the population of 201 students, 30 from each grade level

were randomly selected for use as the test sample.

Instrument: A questionnaire was designed consisting of 32 inquiry questions derived from Focus on Man: Social Studies for Utah Schools, a prospectus published by the Utah State Board of Education. This prospectus was utilized as a basis because it is inquiry oriented, focuses on the human aspects of geography, and is the basic reference for social studies in Utah elementary schools. Some questions were copied directly from the prospectus while others were formed from statements of purpose and discussions of goals and objectives.

Each inquiry question falls into one of the following four broader categories of interest:

Category I. Contemporary problem solving questions.

Example: Where would be the best place for a new garbage dump?

Category II. The effects of environment on how man lives.

Example: How do things such as earthquakes and storms affect the way people live?

Category III. Historical comparisons.

Example: How were the early settlers wise or unwise in their use of land?

Category IV. How man affects his environment.

Example: How do industries and their use of land and resources affect you?

Pilot Study: A pilot study was conducted using a group of similarly aged children to ascertain readability and clarity of the instrument. Several minor modifications were made.

Procedure: Each student was asked to respond to each inquiry question in terms of (1) the degree of interest he had in the question and (2) where he perceived to be the best place to learn about the question.

Students expressed their degree of interest on a five point scale as follows:

HOW MUCH DOES THIS INTEREST YOU?

very much	quite a bit	somewhat	a little bit	not at all

Fig. 1, Response format for assessing degree of interest

The students' perceptions of the best place to learn was indicated by checking one of the following 3 categories:

WHERE IS THE BEST PLACE FOR YOU TO LEARN ABOUT IT?

in school	out of school	both

Fig. 2, Response format for assessing perception of best place to learn

Finally, students were asked to list the five activities outside of school which they believed to be the most helpful to them in learning about their physical environment.

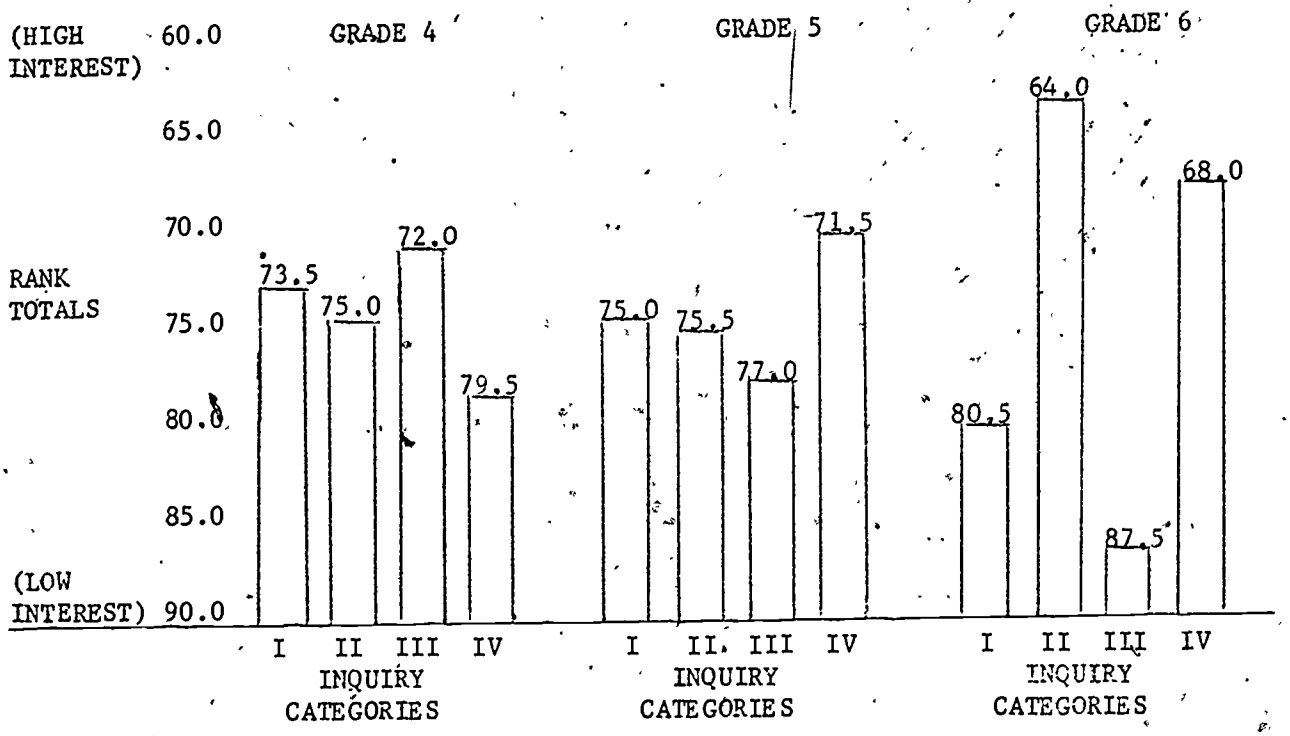
Presentation of Data: The responses of students were analyzed in terms of five specific questions:

1. What differences are there in interest level between inquiry categories for each grade?

   Design. Interest level median scores for each inquiry category were ranked and totaled for each grade level. The Friedman 2-Way Analysis of Variance by Ranks was then used to compare the four categories as shown in table I.

TABLE I

INTEREST LEVEL DIFFERENCES BETWEEN INQUIRY CATEGORIES FOR EACH GRADE LEVEL

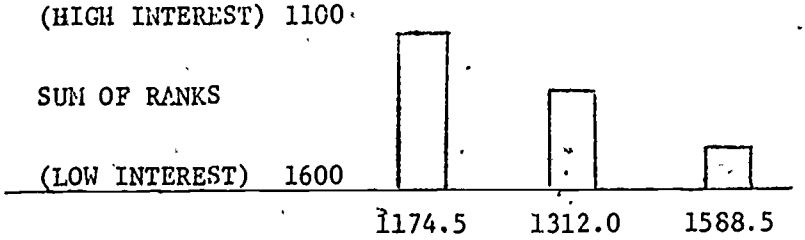


2. What differences are there in the degree of interest among the three grade levels?

Design: Interest level median scores for each child were added and ranked. The ranks were then totaled for each grade level and compared using the Kruskal-Wallis One-Way Analysis of Variance by Ranks. The results are as indicated in table II.

TABLE II

DIFFERENCES IN DEGREE OF INTEREST OF THREE GRADE LEVELS:



3. What degree of interest do children in different grade levels have regarding the inquiry questions?

   Design: Responses for each interest level were totaled for grade level and computed in percentages. Results are in table III.

TABLE III

PERCENTAGE OF RESPONSES IN EACH INTEREST LEVEL FOR EACH GRADE

		INTEREST LEVEL					
		1 (High)	2	3	4	5 (Low)	Totals
GRADE 4	% RESPONSES	33.5%	17.5%	18.5%	13.0%	17.5%	100%
GRADE 5	% RESPONSES	26.4%	25.3%	18.3%	16.4%	13.6%	100%
GRADE 6	% RESPONSES	20.7%	21.5%	22.7%	20.2%	14.9%	100%

4. Where do students perceive to be the best place to pursue their interests in human geography?

   Design: Responses for each Best Place to Learn Category (in school, out of school, both) were totaled for each grade level, and converted to percentages. Results are presented in table IV.

TABE IV

PERCENTAGE OF RESPONSES IN EACH "BEST PLACE TO LEARN" CATEGORY FOR EACH GRADE

		BEST PLACE TO LEARN			
		IN SCHOOL	OUT OF SCHOOL	BOTH	TOTALS
GRADE 4	% RESPONSES	30.0%	27.5%	42.5%	100%
GRADE 5	% RESPONSES	28.0%	33.9%	36.8%	100%
GRADE 6	% RESPONSES	24.8%	28.4%	46.8%	100%

5. What activities outside school do children see as being helpful to them in learning about the physical environment?

Design: Responses were categorized according to the frequency of respons Results are presented in table V.

TABLE V

NUMBER OF RESPONSES FOR THE MOST OFTEN INDICATED "OUTSIDE ACTIVITIES" FOR EACH GRADE

OUTDOOR ACTIVITIES	GRADE 6	GRADE 5	GRADE 4
camping	25	19	26
bike riding	19	11	18
swimming	14	15	8
fishing	13	11	20
hiking	21	10	15
sports & games	8	20	11
hunting	7	10	7

FINDINGS

Findings will be presented for each of the five questions asked.

1. What differences are there in interest level between inquiry categories for each grade?

   Table I reveals that there are no statistically significant differences between interest categories for each grade level (grade 4, xr^2=0.63; grade 5, xr^2=2.67; grade 6, xr^2=7.13) with grade six approaching significance at the .05 level. The two categories of greatest interest to students at this grade level were Category II (Effects of the Environment on How Man Lives) and Cagetory IV (How Man Effects His Environment).

2. What differences are there in the degree of interest among the three grade levels?

   Table II reveals that the degree of interest between grade levels was significantly different at the .001 level with interest decreasing from grade four to five, and five to six.

3. What degree of interest do children in the different grade levels have regarding the inquiry questions?

   Table III reveals that fourth, fifth, and sixth grade students expressed interest levels that were generally positive (tending toward the high side of the scale). Most positive were those made by fourth graders with one-third (33.5%) of the responses at the "Very Much" level. Even the sixth graders, while being less interested than either fourth or fifth grades leaned slightly toward the positive side.

4. Where do students perceive to be the best place to pursue their interests in human geography?

   Table IV reveals that students in the fourth, fifth, and sixth grades perceive the best place to pursue their interests in human geography as both in and out of the classroom. This category received the highest frequency of response by all three grades.

5. What activities outside of school do students see as being helpful to them in learning about the physical environment?

   Table V reveals that activities such as camping, bike riding, swimming, fishing, hiking, hunting, and sports are viewed by students as being most helpful in learning about the physical environment.

CONCLUSIONS

That the man-land approach is appropriate for geographic inquiry in the upper elementary school grades is supported by this study. In general, respondents indicated a positive interest in the inquiry questions and viewed outdoor activities as a viable source for learning about this physical environment.

The degree of interest, while on the positive side for all grade levels was highest for fourth graders with a third (33.5%) of their responses in the "Very Much" column. While still on the positive side, interest declined for the fifth graders and was lowest for those in the sixth grade.

A number of possible explanations for the decrease of interest with increase in grade level are possible. It is possible to attribute the decrease to the school's inability to sustain students' interest in their physical environment through the traditional approach to teaching geography. A child whose curiosity is not satisfied in school either finds satisfaction out of school or simply loses interest altogether.

However, other factors may be present to contribute to the decline of interest. At the age when students are midway through their sixth grade year, there may be other interests developing which begin to take priority. It is also possible that sixth graders are simply more honest and more willing to reveal their true interests.

Some degree of support for this possibility is indicated by the data which reveals greater discrimination among categories for sixth graders than for students in either of the other two grades. While the variations did not quite reach significance, they clearly showed that sixth graders experienced a greater interest in categories II (The effects of environment on how man lives) and IV (How man affects his environment) both of which pertain to the current problems of ecology. This preference perhaps can best be accounted for by the supposition that categories II and IV are more relevent as they deal with problems which are current and can easily be identified with, while category I (Contemporary problem solving) is too hypothetical in nature, and category II (Historical comparisons) is too academic.

Apparently students in all three grades have faith that both In School and Out of School activities are necessary to preserve their interests in the physical environment. Students in each grade level responded with greater frequency in the Both category while the remaining responses for each grade level were fairly well divided between In School and Out of School. There was a slight decrease in the In School category from 4th to 6th grades indicating that children, as they get older, are less optimistic about the In School activities being the only approach to learning.

Students' indications that the leisure activities of camping, bike riding, swimming, fishing, hiking and hunting are helpful in learning about their physical

environment suggests that we may be passing up opportunities to capitalize on children's outdoor activities as effective means of inquiry. Not only might schools formally structure out-of-school experiences similar to those leisure activities indicated by the students, but children, if properly motivated, could be encouraged to extend inquiry into their out-of-school activities. It is interesting that few, if any, listed activities such as traveling, TV, movies, vacationing, reading, or visits to such places as libraries, parks, and zoos as being helpful. Possibly, students merely responded in terms of what they like to do out of school rather than seriously considering just what activities are most helpful in learning about the physical environment. Future research must be more specific in gaining accurate responses from children in this regard.

RECOMMENDATIONS

1. That the man-land approach continue to be implemented and expanded upon as the major focus of geographic study in the upper elementary school grades.
2. That the study of geography at these grade levels be primarily inquiry oriented, building upon the students' own interests in the physical environment.
3. That more attention be paid to the study of ecology at the sixth grade level.
4. That a field-based approach to geographic inquiry supplement in-class activities.
5. That students be encouraged to continue their inquiry into their out-of-school leisure activities.

REFERENCES

Bruner, J., The Relevance of Learning. New York: W. W. Norton, 1974.

Elkind, D., Children and Adolescents, Interpretive Essays on Jean Piaget. New York: Oxford University Press, 1974.

Hopkins, M., Learning Through the Environment. London: Longmans, 1968.

Suchman, R. J., "Learning Through Inquiry." Childhood Education, Vol. 41, pp. 289-291, 1965.

McCartin, R., "The Cognitive and Affective Learning of Children."Focus on Geography, Key Concepts and Teaching Strategies. Washington: National Council for the Social Studies, 40th Yearbook, 1970, pp. 229-262.

Gospill, G. H. The Teaching of Geography. London: Macmillan & Co. LTD., 1961.

Broek, J. O.,Geography Its Scope and Spirit. Columbus: Charles E. Merrill Pub. Co., Social Science Seminar Series, 1965.

Vuicich, G. and Stoltman, J., Geography in Elementary and Secondary Education: Tradition to Opportunity, Boulder: Social Science Education Consortium, p. 171, 1974.

Chase, L. W. and John, M. T., A Guide for the Elementary Social Studies Teacher. Boston: Allyn and Bacon, 1972.

Bacon, P., "Changing Aspects of Geography and the Elementary Curriculum." In J. Jarolimek & H. Walsh (Eds.) Readings for Social Studies in Elementary Education. New York: Macmillan Pub. Co., Inc., 1974, pp. 78-83.

Knox, G. A. Child Development and Social Studies Curriculum Design: Toward a Rationale. ERIC Microfiche ED 084 179.

Morrisett, I. & Stevens, W. (Eds.), Social Science in the Schools: A Search for a Rationale. New York: Holt, Rinehart and Winston Inc., 1971.

Spodek, B., "Developing Social Science Concepts in Kindergarten." In Beldman, M. & Seifman, E., The Social Studies, Structure, Models, and Teaching Strategies. Englewood Cliffs: Prentice Hall, 1969, pp. 325-339.

Herman, W. L., "How Intermediate Children Rank the Subjects." In Herman, W., (Ed.) Current Research in Elementary School Social Studies, New York: Macmillan and Co., 1969, pp. 153-159.

Report of the Geography in Liberal Education Project. ERIC Microfiche ED 081 704.

Stoltman, J. P., "Children's Conception of Territoriality: A Study of Piaget's Spatial Stages." Unpublished doctoral dissertation, University of Georgia, 1971.

Piaget, J., Judgment and Reasoning in the Child. London: Kegan Paul, 1928.

Rand, D. C. and Towler, J. O., Piaget's Geographical Spatial States: An Examination of Their Relationship to Elementary Children's Classification-Class Inclusion Abilities. Paper presented at National Council for Geography Educators, Washington D. C., 1973.

Rice, M., The Case for the Disciplines in the Organization of Social Studies Curriculum for Elementary and Secondary Schooling. Paper presented at the National Council for the Social Studies Conference, Boston, Massachusetts, 1972.

Clark, L. H. Teaching Social Studies in Secondary Schools: A Handbook. New York: Macmillan Pub. Co., Inc., 1973.

Hawkins, D. and Vinton, D., The Environmental Classroom. Englewood Cliffs: Prentice Hall, 1973.

Wipper, K. et. al., Outdoor Education Without Boundaries: Proceedings of International Conference on Outdoor Education. ERIC Microfiche ED 081 551.

Fitzpatrick, C. N., Philosophy and Goals for Open Education. Unpublished doctoral dissertation, Colorado State College, 1968.

Weiner, M., Developing a Rationale for Environmental Education. Ann Arbor: University Microfilms, 1965.

Lucas, A. M., Environment and Environmental Education: Conceptual Issues and Curriculum Implications. Unpublished doctoral dissertation, Ohio State University, 1972.